

FIRE: N52497 Bulldog Mountain		FIRE YEAR: 2018	DATE OF REPORT: 2018-11-23	
AUTHOR: SNT Geotechnical Ltd.				
REPORT PREPARED FOR: Selkirk Resource District (Arrow FD), and Southeast Fire Centre				
FIRE SIZE, LOCATION, AND LAND STATUS: 2227 ha. Southwest side of Lower Arrow Lake, 30 km west of Castlegar. Mostly provincial forest; private land in lower Dog Creek (Renata) and lower Pup Creek (Brooklyn).				
VALUES AT RISK: Houses at mouth of Pup Creek (locally known as Brooklyn); houses at Renata on right bank of Dog Creek; water quality on Pup Creek and right bank tributary of Dog Creek; rail trail at Bulldog Tunnel; natural arch trail.				
WATERSHEDS AFFECTED ¹:	TOTAL AREA (ha)	AREA BURNED ² (ha)	BURN SEVERITY ³	
Churchill Creek	147	133	% High	% Moderate
Brooklyn Creek	740	223	2	21
Pup Creek	2269	384	0	18
Dog Creek right bank tributary	135	132	0	7
"Arch Creek"	214	214	0	6
<i>1. Only watersheds with significant risks are included</i>		<i>2. Area within fire perimeter</i>		<i>3. % of total watershed area</i>
SUMMARY OF HAZARDS AND RISKS:			HAZARD ⁴	RISK ⁵
Water quality in Dog Creek or tributary			VL	L
Water quality in Pup Creek			L	L-M
Houses at Brooklyn – possible debris flow on Churchill Creek or face to north			L	L
Rail trail at Bulldog Tunnel entrance – possible landslides from burned area or logging road			L	L
"Arch Creek" – possible debris flow affecting recreation trail			L	L
<i>4. Hazard = P(H), the probability of occurrence of a hazardous event</i>				
<i>5. Risk = Partial risk P(HA) = P(H) × the probability of it reaching or affecting an element at risk</i>				
FURTHER ACTIONS:				
Ensure adequate drainage control on logging roads in Brooklyn Creek, to minimize potential landslide hazard and water quality impacts.				
Logging of planned cutblock at head of Churchill Creek should consider potential debris flow hazard on steep slopes below.				
COMMENTS:				
Churchill Cr and Brooklyn Cr are tributaries of Pup Cr. Water licenses are on Pup Cr.				

